Severe local storms, July, 1931—Continued

Place	Date	Time	Width of path, yards [1]	Loss of life	Value of property destroyed	Character of storm	Remarks	Authority
Tuckerton, Pa.	24				$15,000	Electrical	No details reported	Official, U. S. Weather Bureau.
Maxwell (near), N. Mex.	25		3 mi.		3,000	Hail	Crops hurt; path 8 miles	Do.
Middle Hope and Marlboro, N. Y.	27	5:45 p. m.	1,320		2,000	Wind squall and rain.	Vineyards damaged	Do.
Moorhead, Minn., to Fargo, N. Dak.	27				12,000	Wind and hail	Crops and buildings damaged	Do.
Ganado to Fort Defiance, Ariz.	28	6 p. m.	4 mi.	3	275,000	Hail and rain	Severe loss to crops and stock; buildings and irrigation dam damaged.	Do.
Bernville, Pa.	29				10,000	Electrical	No details reported	Do.
Colchester and Winooski Valley, Vt.	29					Wind and rain	Trees and weak buildings blown down; crops hurt.	Do.
Lindrith, N. Mex.	30					Hail and rain	Corn and bean crops considerably damaged	Do.
Pomeroy (near), Wash.	30					Hail	Standing grain damaged 50 per cent	Do.
Fillmore and Saline Counties, Nebr.	31	2-3 p. m.	2 mi.		10,000	do	Damage to crops estimated at 50 per cent in places; path 16 miles long.	Do.
Dallas County, Iowa	31	2:30 p. m.			4,100	Wind and hail	Buildings and crops damaged	Do.
Harmony, Nebr.	31	7 p. m.				Small tornado	A few outbuildings destroyed	Do.

[1] "Mi." signifies miles instead of yards.

RIVERS AND FLOODS

(River and Flood Division, Montrose W. Hayes in charge)

By RICHMOND T. ZOCH

The only overflows of consequence in the principal rivers of the United States during July, 1931, were those in the Pascagoula and Pearl River systems of Mississippi. These floods caused damage to the extent of $165,000, most of which was the result of 25,000 acres of prospective crops being inundated. The money value of property saved by warnings was estimated at $5,000.

The usual table of flood stages which occurred at Weather Bureau gaging stations appears herewith. No damage was reported at any of these places except that mentioned in the preceding paragraph.

Heavy local rains caused numerous overflows in creeks and small streams where it is impracticable to maintain warning service. Damages were reported (but the extent or amount was not given) at Bremen, Ohio, on July 2, at Cawker City, Kans., on July 6, in central Vermont on July 22, at Portsmouth, Ohio, on July 23, at Pocatello, Idaho, on July 29, and at Helena, Mont., and Cheyenne, Wyo., on July 30. On July 9 severe local rains caused floods in small streams in and around Scranton, Pa. The damage was estimated at $50,000. On July 14 a severe storm caused floods in the small streams in and around Philadelphia, Pa. The damage was estimated at $1,000,000.

The Mississippi River and nearly all of its tributaries remain at very low stages.

Table of flood stages in July, 1931

River and station	Flood stage	Above flood stages—dates		Crest	
		From—	To—	Stage	Date
ATLANTIC SLOPE DRAINAGE					
	Feet			*Feet*	
Susquehanna: Oneonta, N. Y.	12	11	11	12.0	11
Neuse: Smithfield, N. C.	14	5	5	14.2	5
Santee: Rimini, S. C.	12	13	13	12.2	13
EAST GULF OF MEXICO DRAINAGE					
Chickasawhay: Enterprise, Miss.	21	28	30	22.1	29
Pearl: Jackson, Miss.	20	28	31	22.3	31
MISSISSIPPI SYSTEM					
Red Basin.					
Sulphur: Ringo Crossing, Tex.	20	26	26	20.4	26
WEST GULF OF MEXICO DRAINAGE					
Rio Grande:					
Riogrande, Tex.	21	19	19	23.5	19
San Benito, Tex.	23	20	22	24.7	21
Brownsville, Tex.	18	21	22	18.5	22
GULF OF CALIFORNIA DRAINAGE					
Colorado: Parker, Ariz.	7	1	1	7.0	1
		8	14	7.2	9–11

WEATHER OF THE ATLANTIC AND PACIFIC OCEANS

By the Marine Division, W. F. MCDONALD in charge

NORTH ATLANTIC OCEAN

By W. F. MCDONALD

The average barometric pressures over the Atlantic and its adjacent coasts during July, 1931, did not depart greatly from the monthly normals except over Iceland, the British Isles, and Scandinavia, where the barometer averaged considerably below normal. From Halifax to the Spanish Peninsula there was a slight excess in average air pressure, and a slight deficiency from the Caribbean region to Bermuda and New England. (See Table 1.)

These conditions represent a displacement northeastward of the Atlantic centers of action during July, with some intensification of the usually inactive center of low pressure over the northeastern Atlantic, which is reflected in the fact that the British Isles experienced unusually cloudy and unsettled weather.[1] The pressure over southern Greenland (Julianehaab) continued above normal though not up to the extraordinary height shown by average pressure in the preceding month when the mean barometer was 30.07 inches.

TABLE 1.—*Averages, departures, and extremes of atmospheric pressure (sea level) at selected stations for the North Atlantic Ocean and its shores, July, 1931*

Stations	Average pressure	Departure	Highest	Date	Lowest	Date
	Inches	*Inch*	*Inches*		*Inches*	
Julianehaab, Greenland [1]	29.94		30.32	9th	29.53	1st.
Reykjavik, Iceland [1]	29.71	−0.12	30.10	7th	29.36	23d.
Aberdeen, Scotland [2]	29.68	−.24	[3] 30.01	1st	[3] 29.33	27th.
Valentia, Ireland [2]	29.83	−.18	[3] 30.20	21st	[3] 29.52	14th.
Lisbon, Portugal [1]	30.07	+.05	30.30	25th	29.94	22d.
Madeira [1]	30.11	−.02			29.95	22d.
Horta, Azores [1]	30.34	+.07	30.52	1st	30.08	10th.
Belle Isle, Newfoundland [1]	29.83	−.04	30.38	8th	29.38	5th.
Halifax, Nova Scotia [1]	29.96	+.01	30.26	10th	29.62	31st.
Nantucket [2]	29.93	−.05	30.13	13th	29.52	22d.
Hatteras [2]	29.96	−.05	30.16	14th	29.75	22d.
Bermuda [1]	30.09	−.04	30.28	25th	29.86	4th.
Turks Island [1]	30.05	−.02	30.18	12th	29.96	1st.
Key West [1]	29.97	−.06	30.10	20th	29.85	9th.
New Orleans [2]	29.96	−.04	30.15	30th	29.73	15th.

[1] All data based on a. m. observations only, with departure computed from best available normals related to time of observation.
[2] Corrected 24-hour means, based on more than one observation daily.
[3] Highest and lowest from one observation daily (a. m. only).

[1] Monthly Supplement to the Daily Weather Report. British Meteorological Office July, 1931.